$$E = R^{-6}/(R^{-6} + R_o^{-6})$$

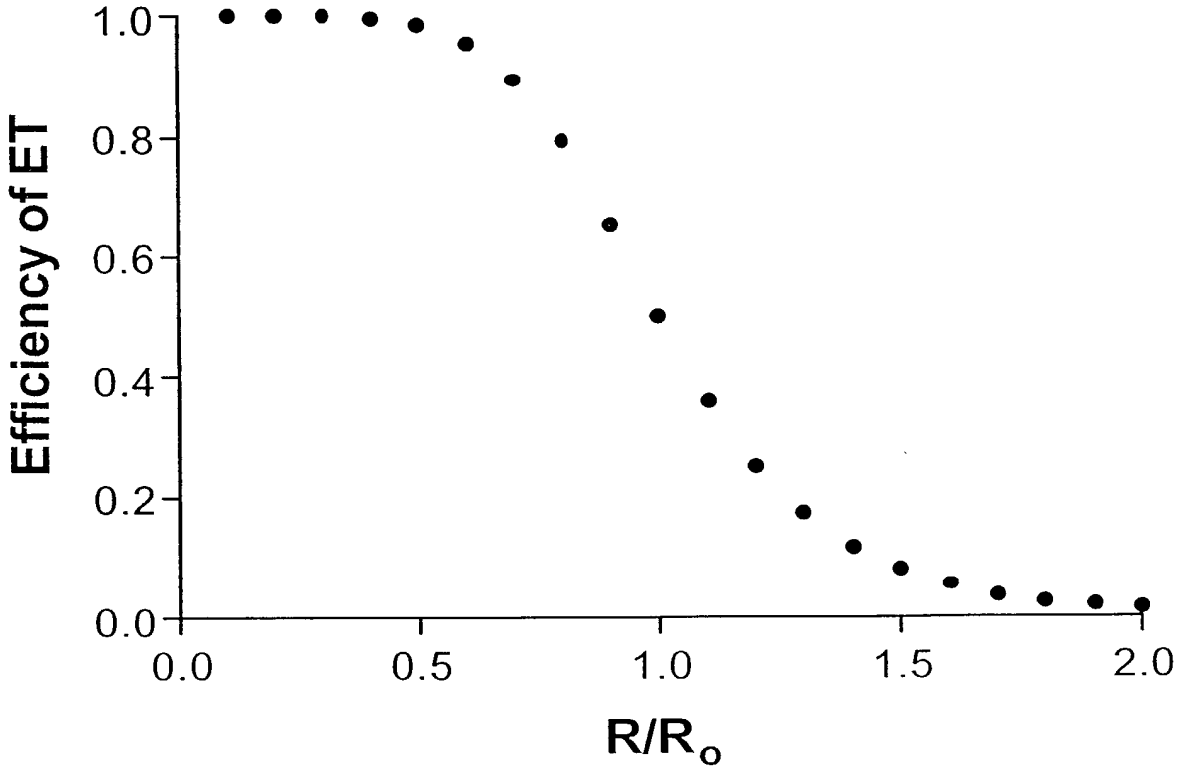


FIG. 1

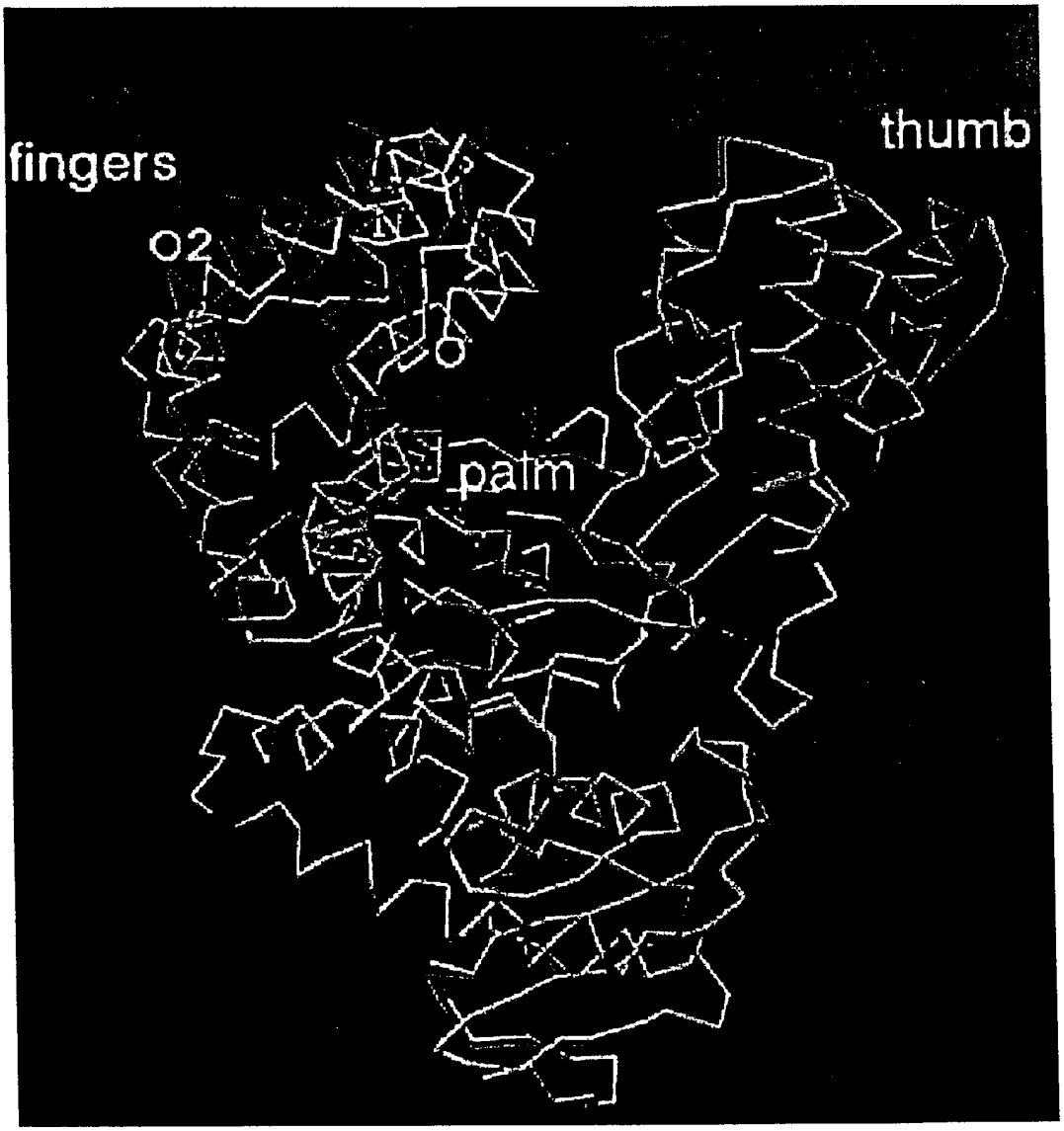


FIG. 2

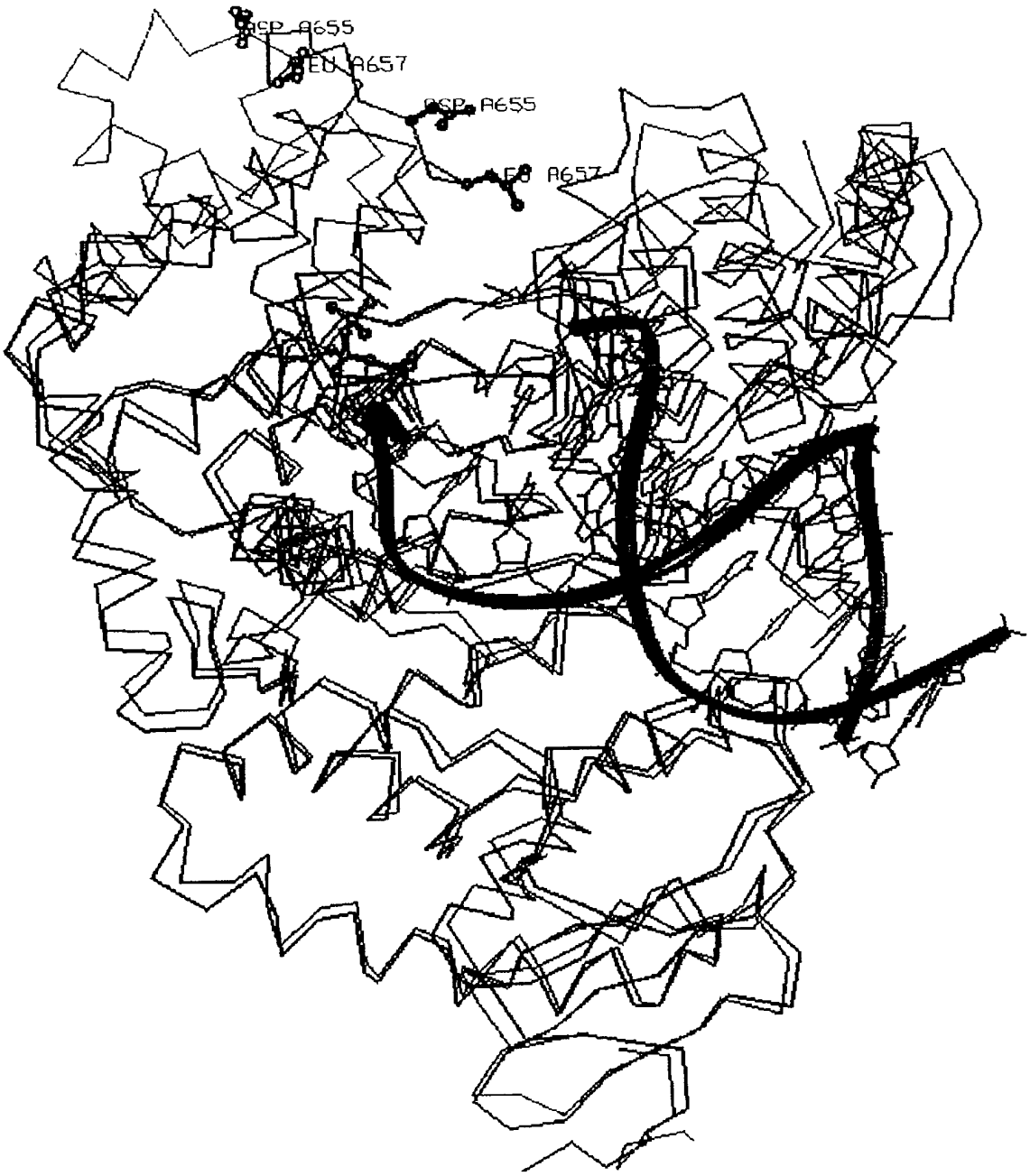


FIG. 3A

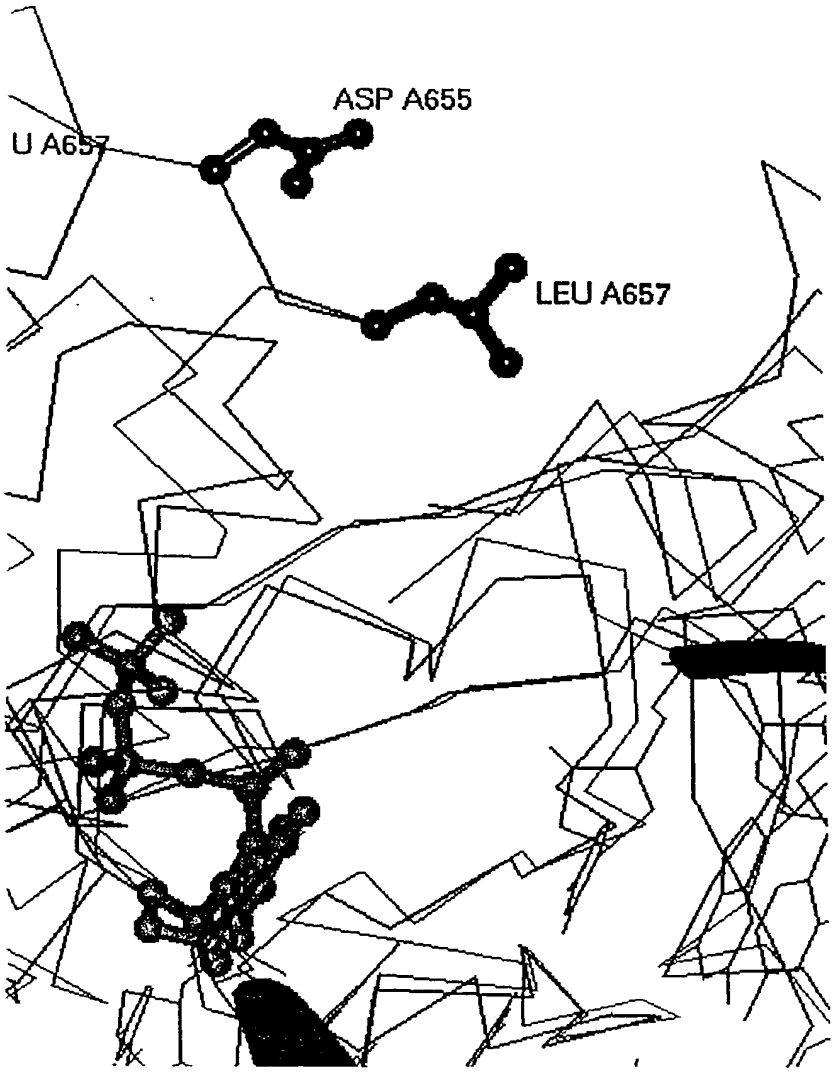


FIG. 3B

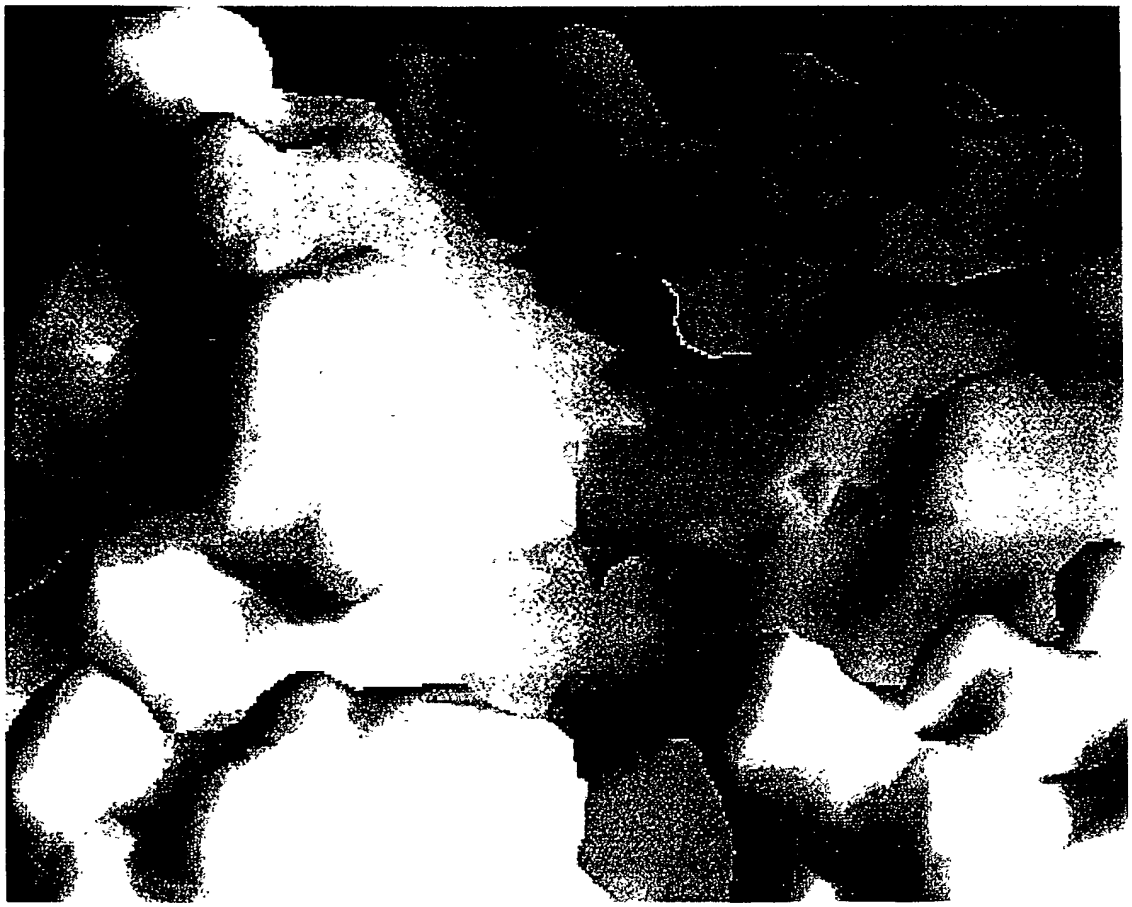


FIG. 3C

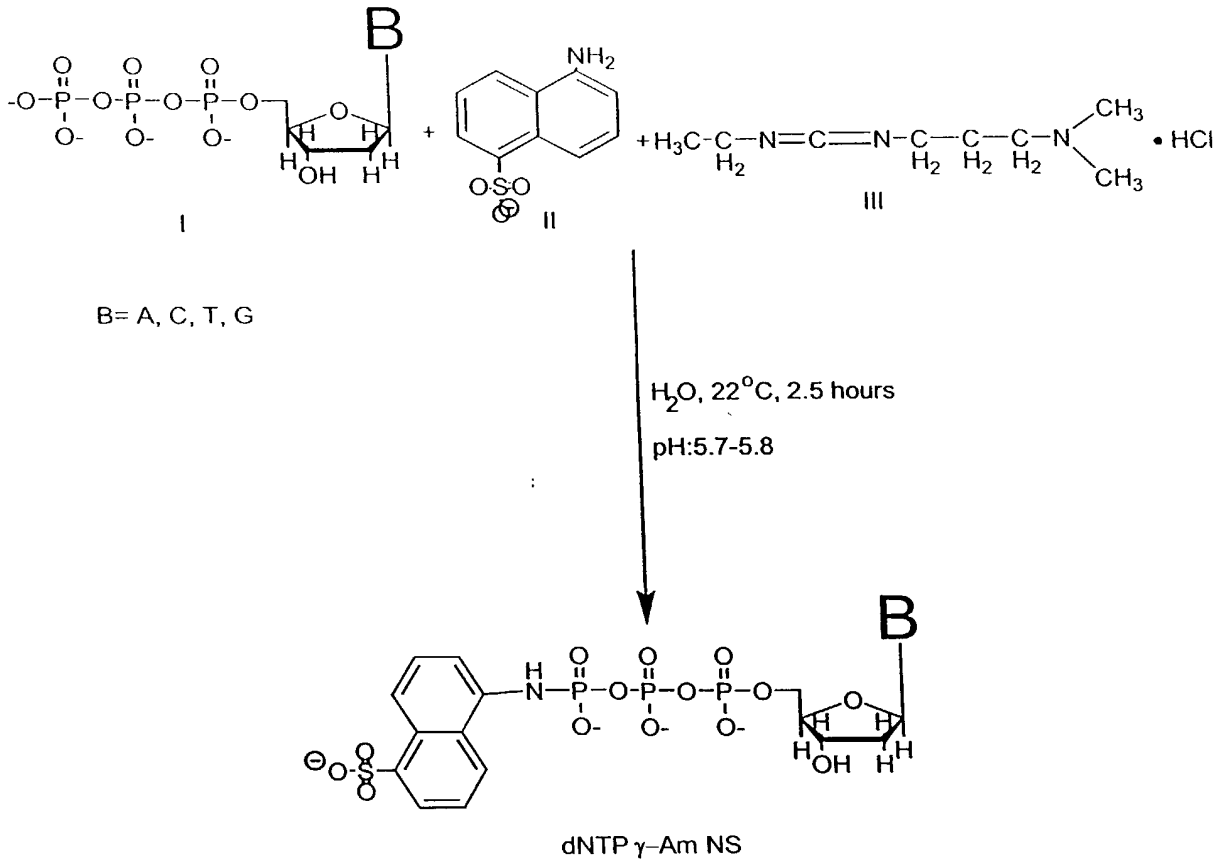

B
NH2
+H3C-C-N=C=N-C-C-C-N
CH3
CH3
• HCl
I
II
III
B= A, C, T, G
H2O, 22°C, 2.5 hours
pH:5.7-5.8
B
dNTP γ-Am NS

FIG. 4

Primer Strand:	
TOP 5'	GGT ACT AAG CGG CCG CAT G 3'
Template Strands:	
BOT-T 3'	CCA TGA TTC GCC GGC GTA CTC 5'
BOT-C 3'	CCA TGA TTC GCC GGC GTA CCC 5'
BOT-G 3'	CCA TGA TTC GCC GGC GTA CGC 5'
BOT-A 3'	CCA TGA TTC GCC GGC GTA CAC 5'
BOT-3T 3'	CCA TGA TTC GCC GGC GTA CTT TC 5'
BOT-Sau 3'	CCA TGA TTC GCC GGC GTA CCT AG 5'

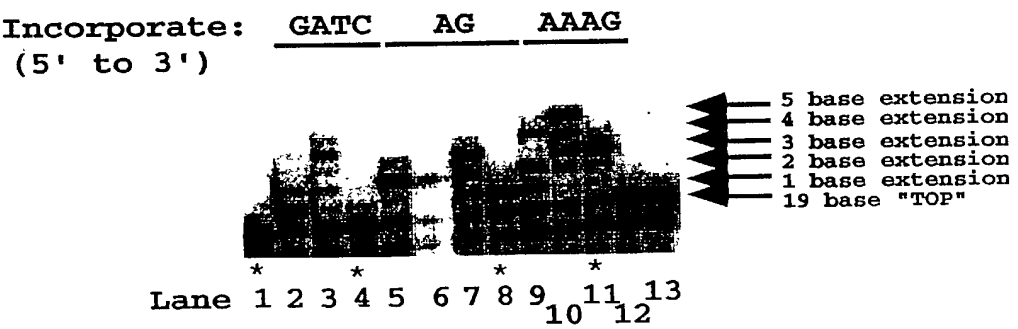


FIG. 5

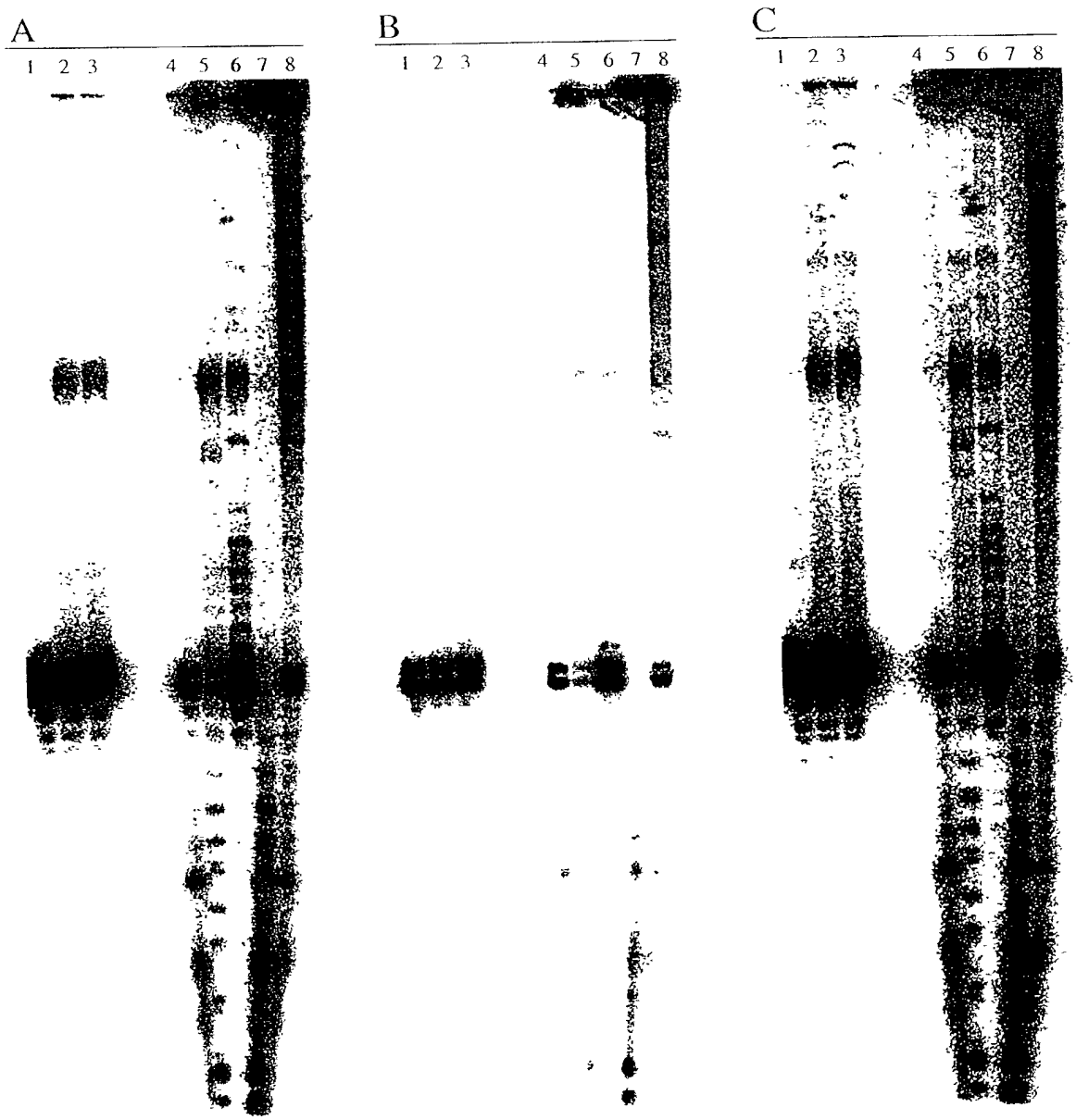


FIG. 6

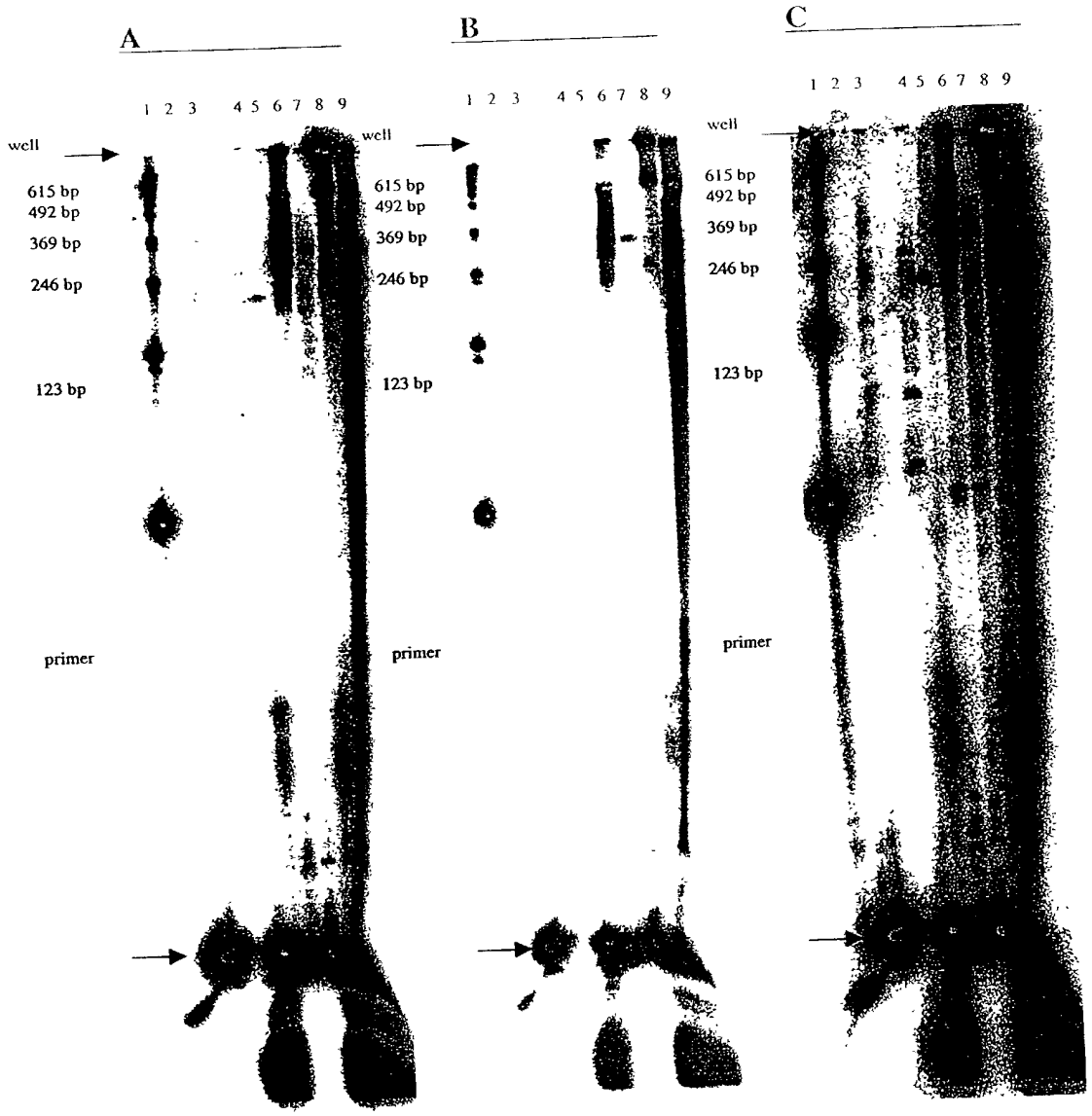


FIG. 7

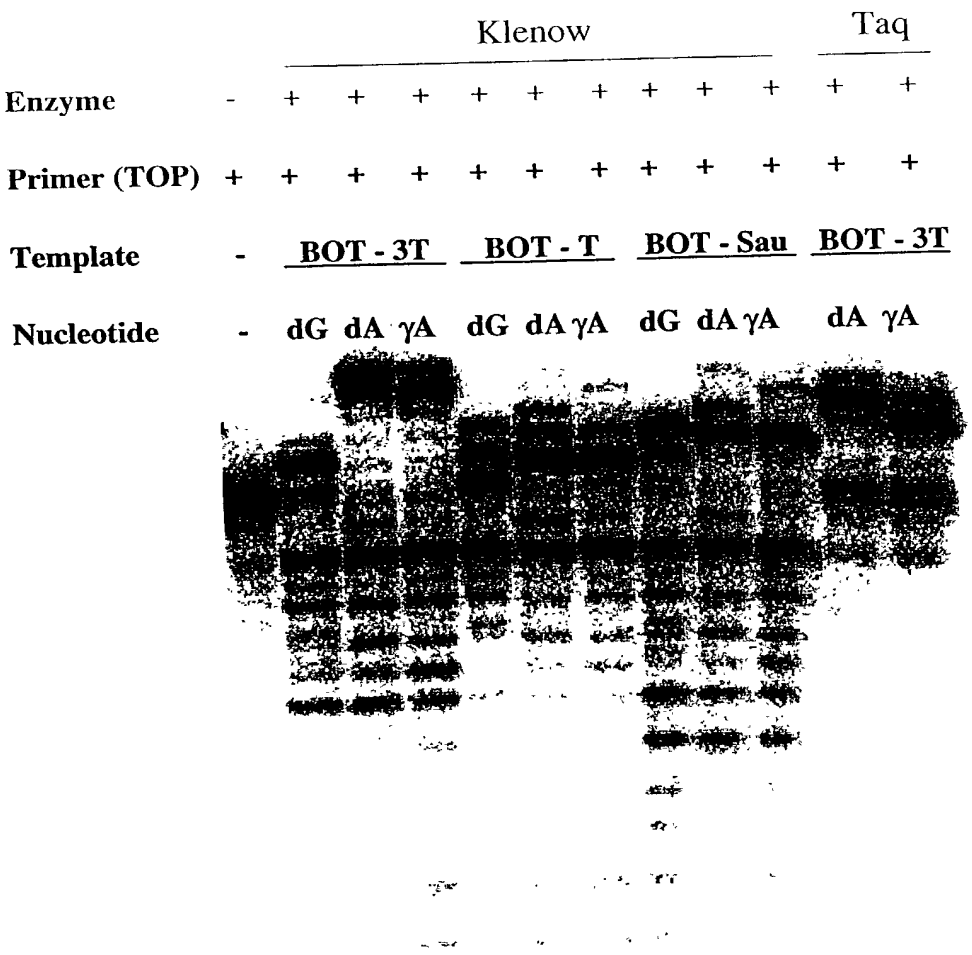

Klenow
Taq
Enzyme - + + + + + + + + + + +
Primer (TOP) + + + + + + + + + + + +
Template - BOT - 3T BOT - T BOT - Sau BOT - 3T
Nucleotide - dG dA γA dG dA γA dG dA γA dA γA

FIG. 8

Pfu Primer Extension Assays

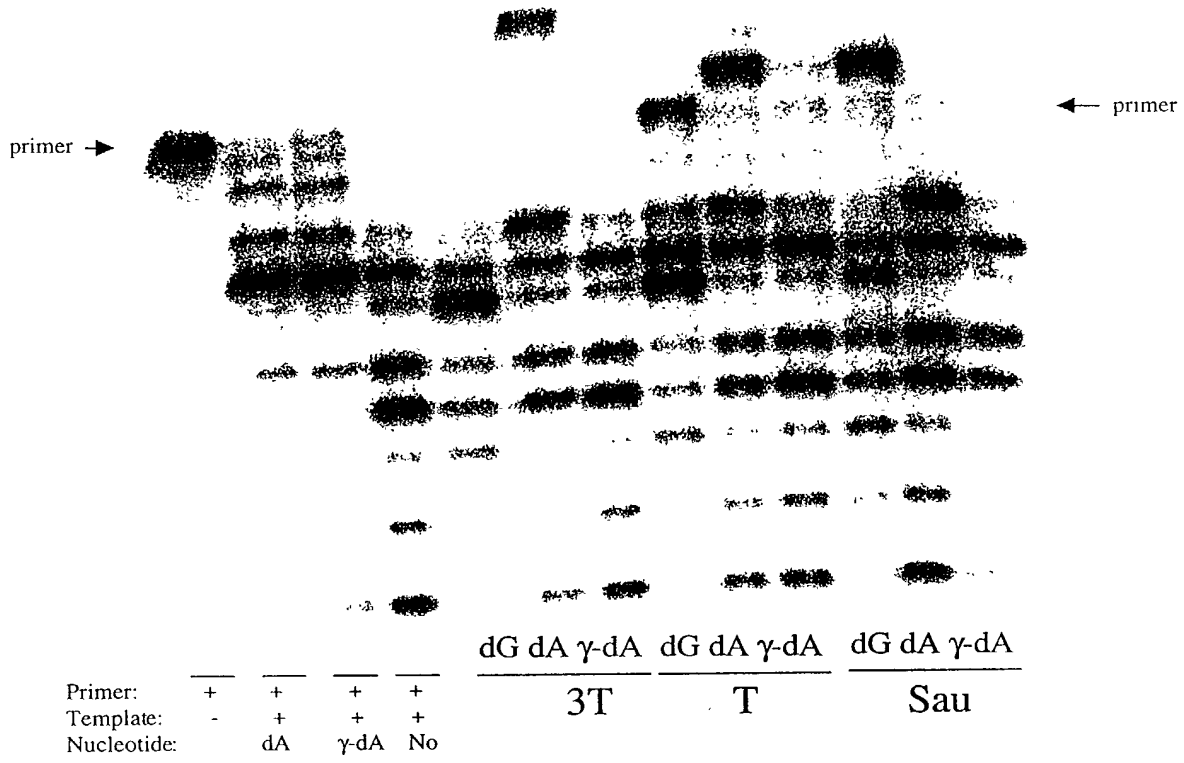


FIG. 9

- Primer Strand:
  Top 5′ GGT ACT AAG CGG CCG CAT G 3′

- Template Strands:
  3T 3′ CCA TGA TTC GCC GGC GTA CTT TC 5′
  Sau 3′ CCA TGA TTC GCC GGC GTA CCT AG 5′

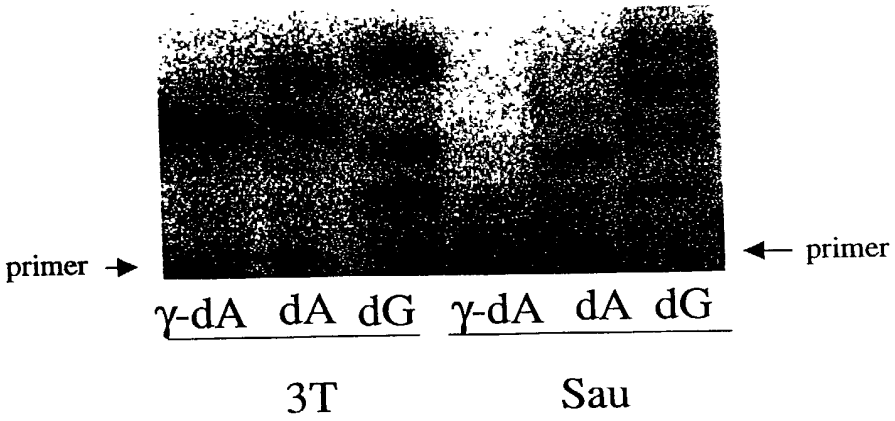


FIG. 10

```
Primer Strand:
     Top  5'  GGT  ACT  AAG  CGG  CCG  CAT G       3'

Template Strands:
     BOT-3T    3'  CCA  TGA  TTC  GCC  GGC  GTA CTT  TC 5'
     BOT-Sau   3'  CCA  TGA  TTC  GCC  GGC  GTA CCT  AG 5'
```

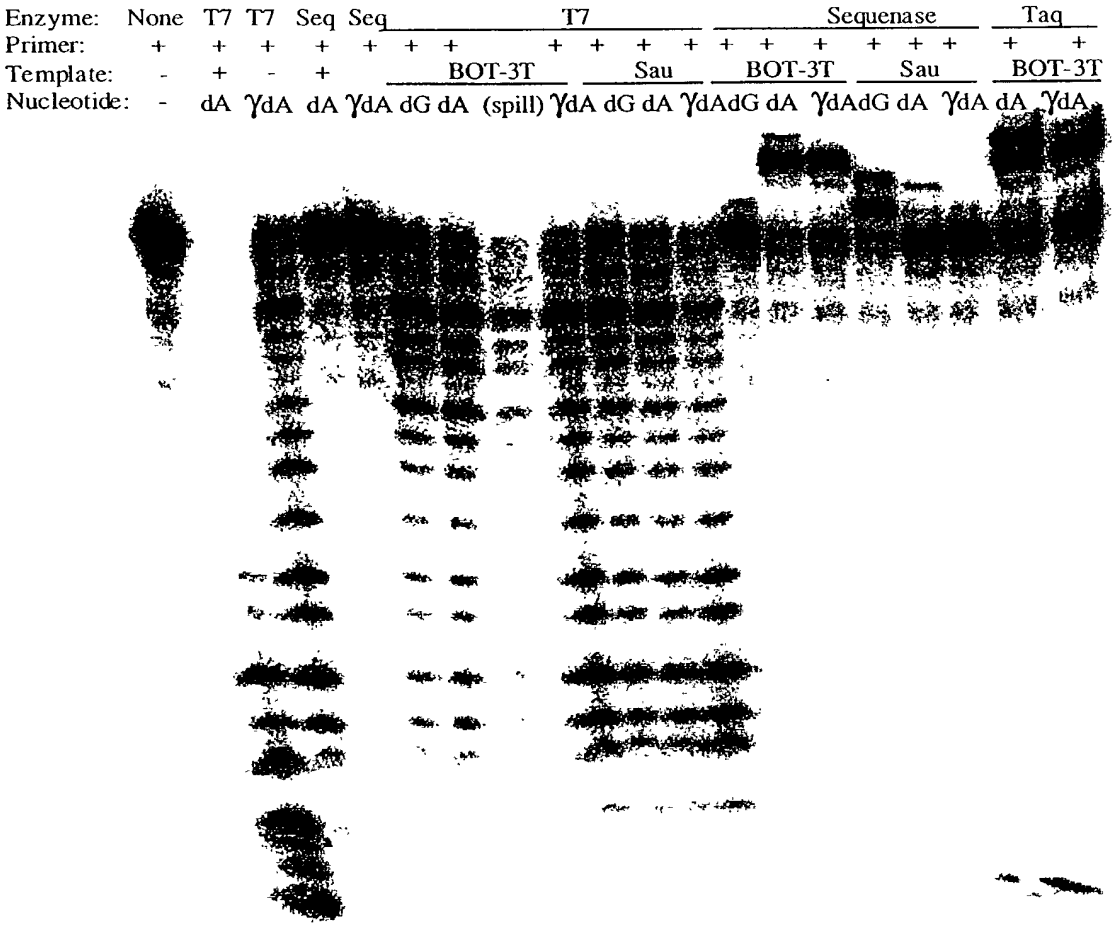
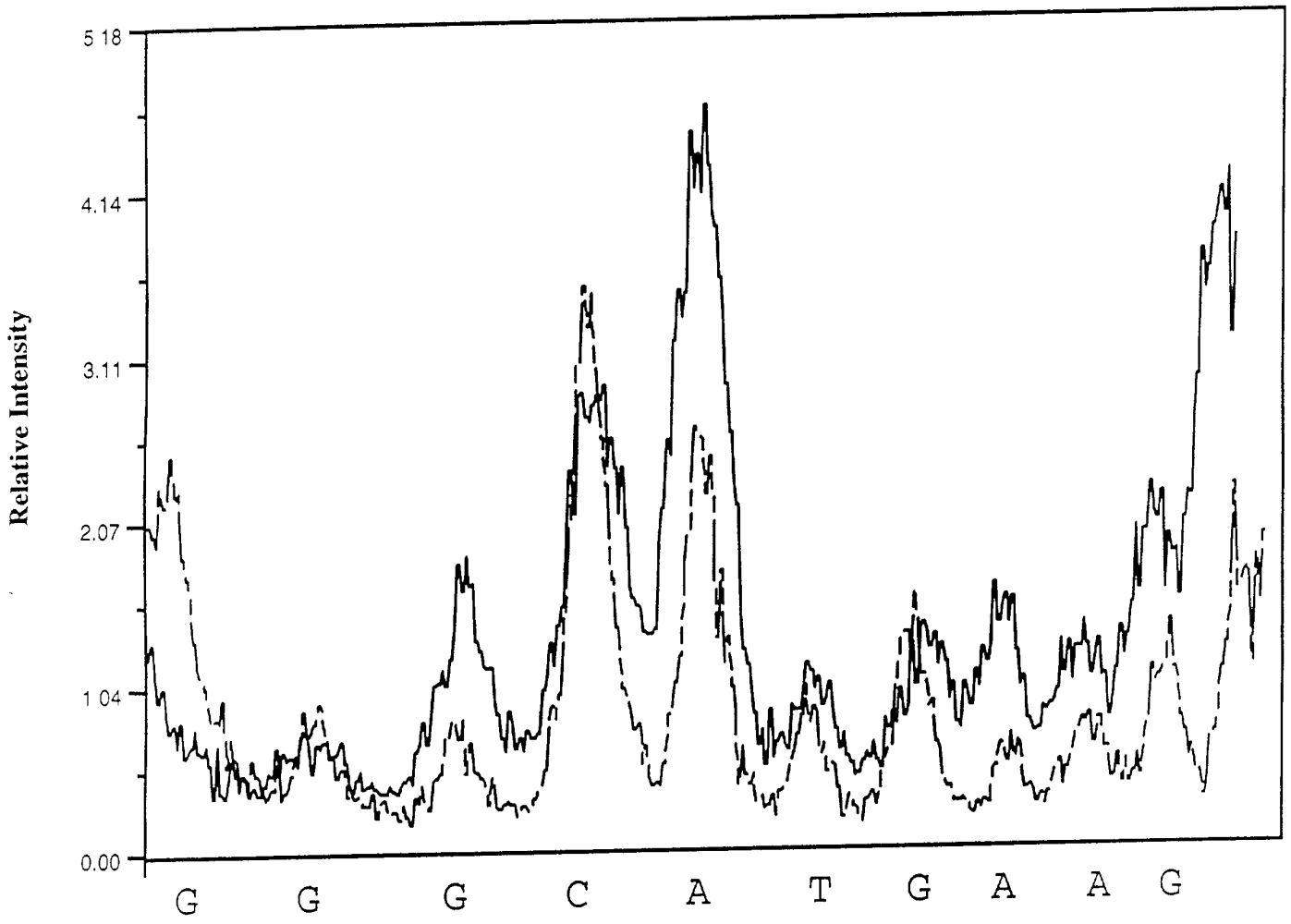


FIG. 11



Signal Intensity and Reaction Kinetics Provide Information Concerning Base Identity.

FIG. 12